

May 2, 2012

VIA ELECTRONIC FILING

Marlene Dortch
Secretary
Federal Communications Commission
445 12th St. S.W.
Washington, D.C. 20554

**Re: Permitted Written *Ex Parte* Presentation in
ET Docket Nos. 10-236 & 06-155**

Dear Ms. Dortch:

Boeing respectfully submits this proposal to augment the measures that were detailed in the Commission's 2010 Notice of Proposed Rule Making intended to promote innovation in spectrum use by injecting additional flexibility in the rules for experimental licenses.¹ As Boeing and others have detailed in their comments in this proceeding, experimental licensees routinely face significant difficulties and delays satisfying coordination requirements that are increasingly imposed on experimental licenses.² Section 5.85(e) of the Commission's rules indicates that the Office of Engineering and Technology "may, at its discretion" impose coordination requirements on experimental licenses.³ The exercise of this discretion, however, appears to have been abandoned, with coordination and consent conditions routinely imposed on the experimental use of numerous spectrum bands regardless of whether coordination is warranted by the nature of the proposed experimental operations.

¹ *Promoting Expanded Opportunities for Radio Experimentation and Market Trials under Part 5 of the Commission's Rules and Streamlining Other Related Rules, ET Docket No. 10-236, 2006 Biennial Review of Telecommunications Regulations – Part 2 Administered by the Office Of Engineering and Technology (OET), ET Docket No. 06-105, Notice of Proposed Rulemaking, FCC 10-197 (rel. Nov. 30, 2010) ("NPRM").*

² See, e.g., Boeing Reply Comments, ET Docket Nos. 10-236 and 06-105 at 4 (Nov. 5, 2005); Lockheed Martin Reply Comments, ET Docket Nos. 10-236 and 06-105 at 2 (Apr. 11, 2011); see also *NPRM*, ¶ 9 (citing Lockheed Martin Comments, GN Docket Nos. 09-51 and 09-157 at 5 (Sep. 30, 2009) and Boeing Reply Comments, GN Docket Nos. 09-51 and 09-157 at 4 (Nov. 5, 2005)).

³ 47 C.F.R. § 5.85(e).

Major manufacturing and research and development companies such as Boeing depend on experimental licenses to develop new products, and depend on a rapid and responsive experimental licensing process to permit continued innovation. Despite the fact that Boeing's experimental operations are generally at very low power levels, for short durations, and in remote locations, Boeing has experienced growing difficulties securing coordination from wireless licensees. Often, coordination requirements are significantly out of proportion with any interference risks, and coordination demands have complicated Boeing's testing programs, delaying and sometimes preventing tests from occurring. Commercial licensees have little incentive to cooperate in coordination with manufacturers, and the protracted coordination process undermines the "innovation and efficiency" that the Commission intends to promote through its experimental service.⁴

To address this growing problem, Boeing proposes a modest further amendment to the Commission's rules in the form of an experimental "safe harbor" that avoids a coordination requirement for experimental operations carried out at carefully controlled test facilities. Such a coordination safe harbor would generally follow the parameters that the Commission has proposed for its program experimental licenses for universities and innovation zones, including the establishment of specified geographic locations with pre-authorized boundary conditions beyond which emissions may not exceed non-interfering levels.⁵ Experimental licensees (both public and private) operating under a coordination safe harbor would still apply for individual experimental licenses, but, upon meeting the safe harbor conditions, would be exempt from coordination requirements. The safe harbor option would be available for all types of experimental authorizations, including the currently available experimental licenses and grants of special temporary authority as well as any newly-adopted classes of experimental authorizations such as program experimental licenses and innovation zone licenses.

To qualify for the safe harbor, applicants for experimental licenses would specify a controlled test area within which access would be limited to testing personnel and individuals who have been specifically informed that they are entering into a controlled area where testing may occur. RF emissions in the test area would be strictly controlled by the experimental licensee. Importantly, the licensee would ensure that emissions levels beyond the controlled testing area (*i.e.* outside the fence line) do not exceed the threshold power limits permitted for commercial unintentional radiators as specified in Section 15.109(b) of the Commission's rules.⁶ By ensuring that their experimental emissions beyond the boundary of the test area do not exceed the negligible interference potential of unintentional radiators, licensees complying with the coordination safe harbor requirements would not pose a risk of harmful interference to authorized services and should therefore be exempt from coordination obligations.

By permitting experimenters to comply with these strict technical control measures instead of cumbersome coordination procedures, a safe harbor could significantly streamline the experimental licensing process for researchers and spectrum innovators. This proposal therefore fulfills the recommendation of the National Broadband Plan that the Commission

⁴ *NPRM*, ¶ 1.

⁵ *Id.* ¶¶ 22, 42.

⁶ 47 C.F.R. § 15.109(b).

consider rule changes to permit experimentation without individual coordination.⁷ This proposal is also consistent with the Commission's policy that experimental licensing is not necessary where experiments are conducted in RF-shielded facilities because of the exceedingly low potential for interference with other services.⁸

Importantly, the use of a safe harbor approach would not relieve experimental licensees of their other obligations to avoid harmful interference to authorized services and to immediately cease transmissions if harmful interference occurs. Experimental licensees would continue to employ measures such as 24/7 call centers and stop button procedures to ensure compliance.

A coordination safe harbor would balance the needs of researchers and innovators with those of other spectrum users by eliminating coordination requirements when and only when proposed experimental operations are unlikely to cause harmful interference to primary operations. Such a compromise furthers the Commission's goals for the Experimental Research Service and ensures that commercial users are protected. Boeing therefore urges the Commission to adopt a coordination safe harbor as part of its amendments to the experimental rules.

Please contact the undersigned if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bruce A. Olcott', written over a horizontal line.

Bruce A. Olcott
Counsel to The Boeing Company

⁷ *Connecting America: The National Broadband Plan*, Federal Communications Commission, Recommendation 7.7, at 125 (March 2010).

⁸ *NPRM*, ¶ 82.